Gulf of Mexico Harmful Algal Bloom Bulletin

8 March 2005

National Ocean Service

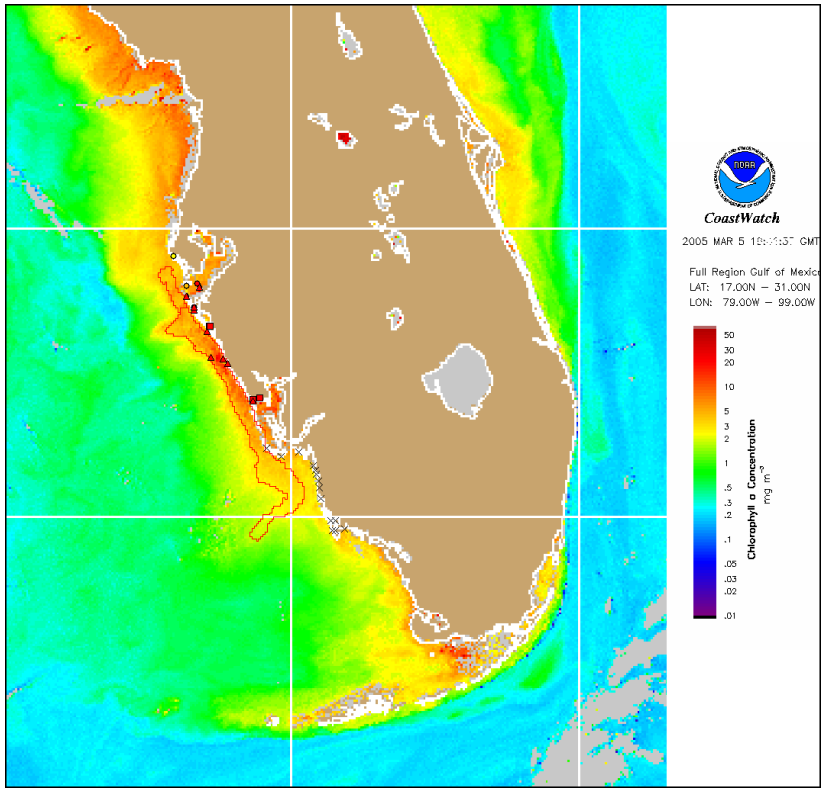
National Environmental Satellite, Data, and Information Service

Last bulletin: March 3, 2005

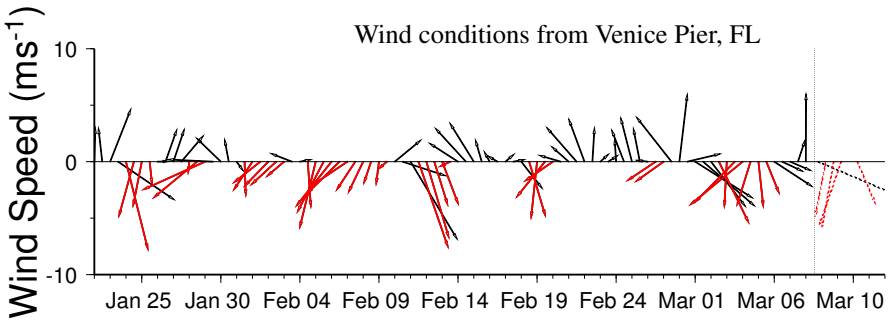
Conditions: A harmful algal bloom has been identified from southern Pinellas to northern Lee counties. Beach impacts in southern Pinellas County are expected to be low to moderate today, very low Wednesday, and low on Thursday. Impacts in Manatee, Sarasota, and Charlotte counties are expected to be patchy moderate to high today, low Wednesday, and patchy moderate to high on Thursday. Impacts in northern Lee County are expected to be low today and Wednesday, and moderate on Thursday.

Analysis: The bloom persists alongshore from southern Pinellas to northern Lee counties, and has expanded to the southwest. FWRI samples from Pinellas County taken on March 2 had low concentrations of *K. brevis*, as well as some diatoms. Mote Marine Lab samples from Sarasota County taken on March 2-3 had a medium to high concentrations of *K. brevis*. FWRI verified ten manatee deaths from Anna Maria Island south to Pine Island, and preliminary reports suggest that the cause of death is red tide toxin exposure. Fish kills and respiratory irritation were reported last week from Anna Maria Island to Boca Grande. Imagery indicates the southern tip of the bloom is at 25°50'N, 82°15'W, 57 km (36 miles) west of Naples. Imagery indicates a chlorophyll concentration over 20 μg/L at 27°4'N, 82°30'W, 30 km (19 miles) west of Sarasota. Near the northern extent of the bloom at 27°26'N, 82°46'W, 7 km (4 miles) from Bradenton Beach, the chlorophyll concentration is above 5 μg/L. Continued southward expansion of the bloom is likely. Southwest winds today and westerly winds later in the week may cause onshore transport in Lee county.

Bronder, Stolz

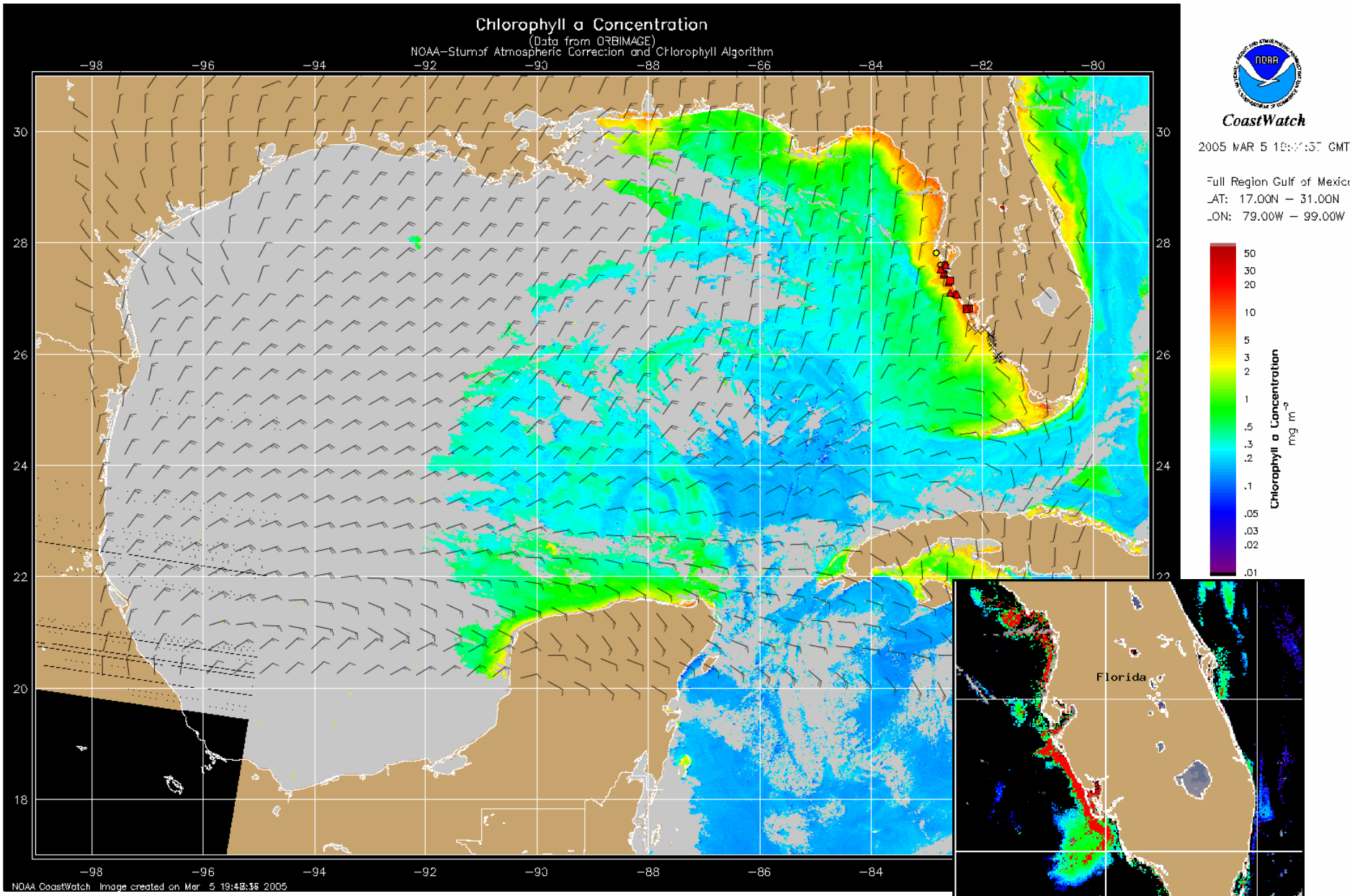


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 4, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Strong southwesterlies today (25 kts, 13 m/s) shifting to the north tonight. Easterlies tomorrow at 15 kts (8 m/s) decreasing and clocking to the southeast Wednesday night. West to northwesterlies Thursday and Friday at 15-20 kts (7-10 m/s).



Chlorophyll concentration from satellite and forecast winds for March 9, 2005 06Z with cell concentration sampling data from March 4, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis and image for interpretation)